Fleet Management System Requirements Definition Working Document

This document is a compilation of system requirements defined by multiple agencies. It is expected the document will change regularly as discussions for a fleet management system progress and requirements are more concisely defined.

GENERAL

- 1. Bar coding capability
- 2. Benchmark maintenance/replacement/transfer parameters by internal need
- 3. Flexibility to adapt program to fleet needs
- 4. Network compatibility with centrally stored database
- 5. Vehicle details (purchase, insurance, disposal, etc.)
- 6. Attachments (GIF, JPG, PDF, DOC. XLS, etc.) to a vehicle (i.e. accident reports)
- 7. System must be easy to use by
 - a. Operator
 - b. Clerical staff
 - c. Fleet manager
 - d. PCA leaders
 - e. Billing staff
 - f. Data entry staff
- 8. System must accommodate complex account coding
- 9. System must have appropriate security
 - a. Ability to limit access by user type/group
 - b. Daily backups
 - c. Recovery
- 10. Ability to make changes to billing data, both current and historical
 - a. PCAs charges
 - b. Default PCA
 - c. Responsible PCA
 - d. Monthly and unit billing rates
- 11. Real time error detection for data input and charge processing
- 12. Maintain complete records on disposed vehicles
- 13. Accommodate and track use of non-fleet owned vehicles
- 14. Ability to suspend monthly billing during periods of inactivity (vehicle is not being used)
- 15. Include most motorized equipment
 - a. Cars
 - b. Trucks
 - c. ATVs
 - d. Motorcycles
 - e. Snowmobiles
 - f. Outboard motors
 - g. Inboard boats
 - h. Forklifts
 - i. Bulldozers
 - i. Cranes, etc.

- 16. Support bulk fuel operations where fuel is dispensed from agency owned tanks
- 17. Support maintenance billing from agency maintenance staff and warehouse operations
- 18. Support motor pool operations
- 19. Ability to manage changes in class codes, rental rates, usage codes, etc.

INVENTORY DATA

- 1. Make
- 2. Model
- 3. Year
- 4. VIN
- 5. Cost
- 6. Date of issue (?)
- 7. Scheduled replacement date
- 8. GVWR
- 9. Inventory control number
- 10. License plate number
- 11. Type of vehicle
- 12. Service profile
- 13. Odometer
- 14. Department assignments (vehicle locations?)
- 15. Unit identifier
- 16. Department contact person
- 17. Area of primary use
- 18. Engine type/size
- 19. Alternate fuel (LPG/Hybrid/E85/Diesel, etc.)
- 20. Fuel capacity and type
- 21. Transmission/power train type
- 22. Warranty provisions
 - a. Bumper to bumper
 - b. Power train
 - c. Emission control systems
- 23. Classification by type (industry recognized)
 - a. GVW
 - b. Design
 - c. Axle configuration, etc.
- 24. Classification by use (internal designations)
 - a. Administrative pool
 - b. Service pool
 - c. Motor pool
 - d. Internal lease with terms
 - e. Vendor lease with terms
- 25. Insurance state: APD or liability only
- 26. Filter, lube, oil specs, etc.
- 27. Ancillary equipment assigned to vehicle (life gates, racks, storage, hoists, etc.)
- 28. Tire data (size, make manufactures, load range)

29. Odometer/operating hours

UTILIZATION DATA

- 1. Days used
- 2. Mileage
- 3. Trips
- 4. Miles per gallon consumption
- 5. Total fuel by vehicle, class, department
- 6. Internal charge back billing capability (People Soft/Oracle)
- 7. Accommodate shared vehicle use by multiple individuals on multiple projects
- 8. Total cost per mile
- 9. Automated scheduling system for personnel
 - a. Online, real-time vehicle reservation
 - b. Vehicle type
 - c. Destination
 - d. Duration
 - e. Accounting codes
- 10. Trip data
- 11. Accident data (who, where, when, how)
- 12. Vehicle acquisitions (also in cost category) (?) and disposals

MAINTENANCE

- 1. Automatic preventative maintenance (PM) tracking based on calendar and mileage or hours
- 2. Notification of overdue maintenance items
- 3. Automatic PM work order generation, by PM schedule criteria and mileage/hour established benchmarks
- 4. Last service date and mileage
- 5. PM parts listing for each vehicle (type of oil, filter, etc.)
- 6. PM and repair history tracking
- 7. PM parts inventory tracking (bar coding preferred)
- 8. Parts warranty tracking
- 9. Tire inventory and replacement tracking
 - a. Miles of use (proper selection of tire to application)
 - b. Months of use (quality of selection-material degradation before wear limit is reached)
- 10. Track in-house service/repair vs. outsourced

COST. AUDIT/CONTROL DATA

- 1. Total operating costs (including PCA or index): depreciation, operating, administrative, overhead, fuel, etc. (Current at any time a query is requested.)
 - a. By make, model, year, etc.
 - b. By classifications
 - c. By task
 - d. By department
 - e. By miles, hours, month, year, life cycle

- 2. Ability to assign a property to a primary user/location
- 3. Default chargeable PCA for non-use periods
- 4. Allocate charges to user's PCA's
- 5. Ad hoc reporting
 - a. Group vehicles by users or purchase dates
 - b. Sum of miles/hours/days used by location
 - c. Vehicle age by class
 - d. Average mpg by class by location
 - e. Average sale price by class, age, mileage, date of sales, etc.
 - f. Accident reporting
- 6. Costs by mile/hour
 - a. PM
 - b. Non PM
 - c. Tires
 - d. Fuel
- 7. Depreciation (methods?)
- 8. Miles/hours/days of use (historical by day, month, year)
 - a. By vehicle
 - b. By internal classifications (administrative, service, motor pool)
 - c. By type of use (internal classification HVAC, electrical, maintenance, etc.)
- 9. Fuel cost/consumption
 - a. By department
 - b. By vehicle class and use
 - c. By make, model, etc.
 - d. Integration with Wright Express
- 10. Preventative maintenance costs
- 11. Unscheduled maintenance costs
- 12. Vendor out source repair (non-warranty) costs
 - a. Major component replacement and repair
 - b. Air conditioning
 - c. Performance/drive-ability
 - d. Tires
 - e. Suspension/braking systems
 - f. Electrical systems and sub-systems (computer controls)
- 13. Tire replacement costs
- 14. Accident damage costs
- 15. Avoidable damage/incidental damage repair (expected war and tear associated with type of use)
- 16. Windshield replacement and repair costs
- 17. Battery costs
- 18. Towing
- 19. Maintenance materials (filters, belts, etc.)
- 20. Vendor warrant repair/recalls
- 21. Lease revenue and costs
 - a. Internal leases/rental agreements

- b. Vendor leases
- 22. Cleaning
- 23. Parts vendor cumulative costs
 - a. By vehicle make, type, class
 - b. By history (inflationary)
- 24. Tool and equipment purchase costs related to maintenance and repair of vehicles
- 25. Technical training history and costs
- 26. Overhead costs
 - a. Administrative
 - b. OSHA compliance
 - c. Waste disposal
 - d. Utilities, etc.
- 27. Analytical tools to assess optimum replacement time, salvage values
 - a. Integration with vehicle valuation databases and tools Chrome, NADA, etc.

REPAIR SHOP

- 1. Risk management
- 2. Vendor information
- 3. Accident data
- 4. Repair estimates
- 5. Salvage company information
- 6. Tool inventory

SYSTEM INTEGRATION/COMPATIBILITY

- 1. Wright Express
- 2. P-Card
- 3. WEX
- 4. Financial systems
 - a. Fiscal
 - b. People Soft
 - c. Oracle
 - d. Navision
 - e. STARS/FAS
 - i. Vehicle billing data
 - ii. Accounts payable charges
 - iii. Reconciliation
 - f. Maintenance vendors
 - g. Excel spreadsheets
- 5. Statewide network of data entry points for vehicle use information
- 6. Risk Management

PRICING, SERVICE & SOFTWARE DELIVERY

- 1. Application service provider models
- 2. Maintenance
- 3. Lease to own, Own to maintain, etc.

4. Implementation and training